DOCUMENT RESUME

ED 045 032 HE 001 869

AUTHOR Caple, Richard
TITLE Group Cohesiveness and Academic Achievement as Related to Residence Hall Students Assigned According to Holland's Theory of Vocational Choice.
INSTITUTION Missouri Univ., Columbia. Coll. of Education.
PUB DATE 70
NOTE 15p.

EDRS PRICE EDRS Price MF-$0.25 HC-$0.85
DESCRIPTORS Academic Achievement, *Attitudes, *Dormitories, *Group Unity, *Higher Education, Occupational Choice, *Students, Values, Vocational Interests
IDENTIFIERS *Hollands Theory of Vocational Choice

ABSTRACT

The purpose of this study was to determine the cohesiveness and attitudes of students who had been assigned to their living units according to Holland's Theory and to determine the influence on academic achievement. According to Holland a person's behavior can be explained by the interaction of his personality pattern with his environment. The Holland "environment" includes six categories: realistic, intellectual, social, conventional, enterprising, and artistic. An attempt was made to answer the following questions: (1) are students assigned to a living unit according to Holland's theory more cohesive than students in a mixed house? (2) how do the attitudes of these two groups of students about their living unit compare? and (3) how does their academic achievement compare. The study included 3 "realistic", 1 "intellectual", 1 "enterprising" and 1 control group. There were significant differences in cohesiveness, but there was more variability among the Holland groups when these groups were compared to the control group. There were no significant differences in attitudes toward the living unit or academic achievement. (AF)

ED 045032

GROUP COHESIVENESS AND ACADEMIC ACHIEVEMENT AS RELATED TO RESIDENCE HALL STUDENTS ASSIGNED ACCORDING TO HOLLAND'S THEORY OF VOCATIONAL CHOICE

BY

HAROLD B. HALL

EPDA INSTITUTE

DR. RICHARD CAPLE

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

HE 001 869

UNIVERSITY OF MISSOURI
COLLEGE OF EDUCATION
1969-1970

GROUP COHESIVENESS AND ACADEMIC ACHIEVEMENT AS RELATED TO RESIDENCE HALL STUDENTS ASSIGNED ACCORDING TO HOLLAND'S THEORY OF VOCATIONAL CHOICE

It is now recognized by many educators that the academic courses which keep students in class from twelve to seventeen hours per week as well as related study time leaves the student approximately one hundred hours per week for other activities. University and college administrators, staff and faculty, in recent years have become concerned with the student and his education outside of the classroom as well as his academic endeavors. Also recognized at this point in time is the fact that the student's academic work is definitely influenced by his out-of-class experiences.

The most logical place, in this writer's opinion, to find out about student life outside of the classroom is the residence hall environment which exists on most college and university campuses. Since this research will be concerned with this type environment and Holland's Theory, a brief explantion of his theory is necessary.

The Holland Environment includes six categories: the realistic, the intellectual, the social, the convential, the enterprising and the artistic. The Environmental Assessment Technique (EAT) is used to evaluate the environment by - assessing the population according to the above six variable profile. Astin and Holland (1961) indicated that a major portion of environmental forces is transmitted through other people and we can infer from this that the character of a social environment is dependent upon the nature of its members. Moreover, the dominant features of an environment are dependent upon the typical characteristics of its members.

COHESIVENESS AND ACADEMIC ACHIEVEMENT:

One of the basic assumptions in theories about the behavior of groups is that attraction to a group is a function of the satisfaction of needs provided by membership in the group Slocum (1968). Members of a group are attracted to each other for various reasons such as commonality of ideas, similarity of ideas, desire for acceptance, competition, task performance and as noted by Tagiuri (1958) the one that is always present, like-dislike.

Cohesiveness defined by Lott (1961) is that group property which is inferred from the number and strength of mutual positive attitudes among the members of a group. Lott and Lott (1965) defined cohesiveness in terms of intermember attraction, which focuses the key of membership in a group on interpersonal relationships.

Cohesiveness seems to be necessary for groups not only to achieve degrees of satisfaction and/or success, but just to exist. In citing Bonner, Lott and Lott (1965) point to the necessity: If we analyze group cohesiveness...in terms of a group's attractiveness for its members, we are confronted by the obvious fact that without at least a minimal attraction of members to each other a group cannot exist at all.

Two factors closely allied with group success are communication and conformity. Lott and Lott (1962) did a study which revealed that both communication level and conformity behavior within groups vary with the degree of group cohesiveness.

In regard to academic achievement, A. W. Astin (1961) when examining college environments found that one type college press stimulates achievement in the natural sciences, while

a different type facilitates achievement in the arts, humanities, and social sciences. Snead (1969) in a study at the University of Missouri which involved sixty-eight males and sixty-six females who had been assigned to the residence halls according to Holland's Theory concluded that students living in an environment that has commonality in interest and personality patterns do well in academic achievement. Crew and Giblette (1965) concluded after studying roommates that the hypothesis of proximity is a factor influencing academic performance among freshman men.

Research not supporting academic achievement as related to a specific environment was done by Prusok (1964). He concluded that there was no difference in grade-point averages among freshmen men living in fraternities, residence halls, living at home, or off campus. Elton and Bate (1966) found that housing students by similarity of educational major does not influence first semester college, academic achievement. Groez and Brandy (1969) in researching student residence and academic performance found that entering freshman tend to achieve equally well regardless of residence and that academic ability is of greater importance than student residence.

In approaching the problem with previous research pointing in two directions as indicated above, Brown (1966) found that manipulation of the environmental press in residence halls can assist colleges in achieving their educational objectives.

The purpose of this study was an effort to determine the cohesiveness and attitude of students who have been assigned to their living units according to Holland's Theory and to determine the influence on academic achievement. This research attempted to answer three questions as follows:

1. Are students who have been assigned to a living unit according to Holland's Theory more cohesive than students living in a mixed house?

2. What is the attitude of students about their living unit who have been assigned according to Holland's Theory in comparison to the attitude of students living in a mixed house?

3. How does the academic achievement of students assigned by Holland's Theory compare with students living in a mixed house

METHODOLOGY

SAMPLE:

Students living in the residence halls at the Universtiy of Missouri, Columbia, during the 1969-70 school session were assigned to living units according to Holland's Theory. Five male living units were drawn at random during the winter semester, 1970 and thirty (30) subjects were drawn at random from each of the five houses. A living unit is an individual floor of a residence hall called a house. In order to be included in the study a house had to be composed of subjects, fifty percent or more of which were categorized into one of Holland's groups. Since students have an option of moving from one hall to another during the year and since returning students are given residence hall preference all of Holland's categories could not be included because of low, Holland percentage loadings. The study included three realistic groups, one intellectual, one enterprising and the control group.

The subjects for the control group were thirty (30) males

drawn at random from mixed houses located throughout the campus. A mixed house is one that is composed of subjects less than fifty percent of which are not categorized in one specific Holland category.

The data necessary for this project was a measure of group cohesiveness, a measure of attitudes concerning living units, each student's academic major, predicted grade point average, and actual grade point average.

The subjects' group cohesiveness and attitudes relative to the residence hall units were determined by instruments administered during the winter semester, 1970. The academic major was obtained from the university housing office and the grade point average from the registrar's office. The predicted grade point average for upper class students was taken from the student's individual cumulative grade point averages. It has been demonstrated that past performance is the best predictor of academic achievement for this group of students, (Fisher, 1961). The predicted grade point average for freshman was obtained from prediction tables for academic success revised by the University of Missouri Testing and Counseling Service, (Krauskopf, Willis, Sell, Schowengerdt, 1969). The tables were based on high school rank and the School and College Ability Test total scores and normed for the University of Missouri, Columbia Campus.

INSTRUMENTS:

Group cohesiveness, A Study of Group Morale, developed by Bernard Goldman, Roosevelt University was administered to measure the cohesiveness of the students in each house. Thurston's Successive Interval Scale, developed by Dr. Richard Caple, University of Missouri, was used to measure student

attitudes toward the residence halls.

RESULTS:

The results of the analysis of variance indicated a significant difference at the (.01 level) when measuring the five Holland groups and the control group on cohesiveness. A Newman-Keuls was employed to take a closer look at the data to determine specific group differences and significance. The cohesiveness differences are shown in Table I and II.

Insert Table I
Insert Table II

A one way analysis of variance indicated no significant difference between the groups concerning attitude toward living units, Table III, and no significant difference between the groups on actual grade point averages, Table IV.

Insert Table III
Insert Table IV

The grade point predicted averages when subjected to the analysis of variance showed a difference at the (.05 level), but since there was no significant difference between the groups on actual grade point average this was irrlevant to the study and this statistical information is not tabled.

DISCUSSION:

This study was an effort to assess the effects of assigning students to a residence hall on the basis of their acade-

mic major according to Holland's Theory. The statistical findings do not lend support to the proposition that students assigned to a residence hall according to this theory of vocational choice are more cohesive than students assigned at random where academic major is not a factor related to assignment. Although there was a difference in cohesiveness as revealed in Table I and II, the variability between the Holland groups and the control group was not of any consequence since the difference between the Holland groups showed more variability in cohesiveness than when comparing Holland groups to the control group.

The actual grade point averages showed no statistical differences which would indicate that although the Holland groups were cohesive; the influence of this environmental press upon students' academic achievement did not demonstrate a positive effect as indicated by Holland (1966) in his theory of vocational choice.

The statistical analysis did not identify a difference in attitudes toward the residence hall units, Table III, from Holland grouping to the control, but based on responses on the Thurston Inventory, the attitudes toward the living units were quite positive. Perhaps there is a relationship between the fact that the Holland groups were cohesive and the attitude responses toward the residence halls. This will have to be determined by additional research which might have considerable merit.

SUMMARY:

The basic results of this research might have given a different picture of Holland's Theory of Vocational Choice related to academic achievement if it had been possible to in-

clude all six categories instead of three realistic, plus an enterprising and one intellectual. The investigation would have been stronger if the groups had been pure Holland or at least seventy five percent instead of fifty percent as they turned out to be during the winter semester, 1970.

The fact that the groups were cohesive may indicate that a positive social atmosphere is operating in the residence halls similar to the social attraction that fraternities demonstrate but this research was not able to determine this possibility. It might be possible that since the control group was quite cohesive, although composed of students from mixed houses (less than fifty percent Holland), it was permeated with the influence of the Holland grouping; because students are assigned according to the theory throughout the residence hall system.

According to Holland (1966) people search for environments and vocations that will permit them to exercise their skills and abilities, to express their attitudes and values, to take on agreeable problems and roles and to avoid disagreeable ones. A person's behavior can be explained by the interaction of his personality pattern and his environment. Therefore it seems logical to assume that the assignment of students to residence halls according to this theory provides the setting for additional research in order to discover the best possible ways of providing maximum, beneficial opportunities for the out-of-class experiences for students in higher education.

REFERENCES

Astin, Alexander W., Holland, John L. The environmental assessment technique: A way to measure college environments. Journal of Educational Psychology, 1961, 52, 308-316.

Brown, Robert Donald Manipulation of the environmental press on a college residence hall. Dissertation abstracts, 1966, 27, 196-A.

Crew, John L., Giblette, John F. Academic performance of freshmen males as a function of residence hall housing. The Journal of College Student Personnel, 1965, 6, 167-170.

Elton, Charles F., Bate, William S. The effect of housing policy on grade point average. The Journal of College Student Personnel, 1966, 7, 73-77.

Fisher, M. B. Trends in college student's grades. Personnel and Guidance Journal, 1961, 39, 491-496.

Goldman. Bernard Group cohesiveness: A study of group morale. Chicago: Psychometric Affiliates, 1958.

Groez. Richard D., Brandt, Kenneth Student residence and academic performance. College and University, 1969, 44, 240-243.

Holland, John L. The psychology of vocational choice. Waltham, Massachusetts: Blaisdell Publishing Company, 1966.

Holland, John L. A theory of vocational choice. Journal of Counseling Psychology, 1959, 6, 35-45.

Krauskopf, Charles J., Willis, Carl G., Sell, John M., Schowengerdt, George C. Predicting academic success at the university of missouri. Testing and Counseling Service Report, 1969, 24, 4-12.

Lott, Albert J., Lott, Bernice E. Group cohesiveness as interpersonal attraction. Psychological Bulletin, 1965, 64, 259-301.

Lott, Albert J. Lott, Bernice E. Group cohesiveness, communication level and conformity. Journal of Abnormal Social Psychology, 1961, 63, 408-412.

Prusok, Ralph E., Walsh, W. Bruce College students residence and academic achievement. College Student Personnel, 1964, 5, 180-184.

Slocum, John W., Jr. Group cohesiveness: A salient factor affecting students academic achievement in a collegiate environment. Int. Journal Educational Science, 1968.

Snead, Robert F. Some effects of the environmental press in university housing. NDEA Institute, University of Missouri, 1969, 6.

TABLE I
ONE-WAY ANALYSIS OF VARIANCE
COHESIVENESS

Source	SS	df	MS	F
Between	1428.96	5	285.79	4.320
Within	11509.77	174	66.15	
Total	12938.73	179		

* Significant at the .01 level

TABLE II

NEWMAN-KEULS

DIFFERENCES AMONG MEANS

		X_2	X_3	X_5	X_6	X_4	X_1
X_2	50.633	–	3.00	3.93	4.50	5.07	9.69 **
X_3	53.633	–	–	.93	.50	2.07	6.47 *
X_5	54.567	–	–	–	.57	1.33	5.53 *
X_6	55.133	–	–	–	–	.57	4.87 *
X_4	55.700	–	–	–	–	–	4.40 *
X_1	60.100						–

X_2 Realistic
X_3 Realistic
X_5 Enterprising
X_4 Intellectual
X_6 Control
X_1 Realistic

** Significant at the .01
* Significant at the .05

Hall

TABLE III

ONE-WAY ANALYSIS OF VARIANCE

ATTITUDE TOWARD LIVING UNIT

SOURCE	SS	df	MS	F
Between	63734.96	5	12746.99	1.187
Within	1869332.62	174	10743.29	
Total	1933067.58	179		

NO Significant difference

TABLE IV

ONE-WAY ANALYSIS OF VARIANCE

ACTUAL GRADE POINT AVERAGE

SOURCE	SS	df	MS	F
Between	5.595	5	1.1191	1.183
Within	106.444	174	0.6117	
Total	112.039	179		

No significant difference